

CLAIMS

1. Procedure for increasing the spontaneity of the crossover gear changes in an automatic transmission, characterized in that with the switching command or immediately thereafter, a motor firing is provided, through which a snatch operation of the switching off switching element and/or an increase in the revolution speed gradient (turbine revolution speed) is achieved.

2. Procedure according to claim 1, characterized in that the motor firing occurs via the presetting of a set rotation speed to be employed or via the presetting of a set motor torque to be employed.

3. Procedure according to claim 1 or 2, characterized in that the motor firing is provided through the gearbox system.

4. Procedure according to one of the foregoing claims, characterized in that the motor firing is realizable up to the maximum attainable full load curve, in which the set rotation speed to be employed and the set motor torque to be employed are provided depending on the intended spontaneity increase.

5. Procedure according to one of the foregoing claims, characterized in that the opening of the switching element, which keeps the revolution speed at the old synchronous revolution speed, is monitored for the protection of an unintentional transfer of the additional required motor firing to the output, in which the opening of this switching element is to occur up to a defined time after the start of the additional motor firing and subsequently a corresponding revolution speed gradient is to be set in a new synchronous revolution speed direction.

6. Procedure according to claim 5, characterized in that it is monitored, whether a continuously and to a certain extent decreasing revolution speed difference is set for a new synchronous revolution speed.

7. Procedure according to one of the foregoing claims, characterized in that the additional motor firing, if a further gearshift is not produced, does not last beyond a certain duration beyond the achievement of the new synchronous revolution speed.

8. Procedure according to one of the foregoing claims, characterized in that the torque signal for the different components of the switching procedure or for the switching off and the switching on switching element either in a motor controller or in a transmission controller are formed differently and are transferred in each case to the other controller.

9. Procedure according to claim 8, characterized in that the additional motor firing actually executed is not transferred to the switching-off switching element or remains unconsidered with the pressure controller of the switching off switching element.

10. Procedure according to claim 8 or 9, characterized in that the additional motor firing actually executed is transferred to the switching-on switching element or is considered with the pressure controller of the switching on switching element.

11. Procedure according to one of the foregoing claims, characterized in that in addition to the motor firing the pressure is reduced in the switching-off switch element, so that the opening of the same is accelerated.

12. Procedure according to one of the foregoing claims, characterized in that in addition to the motor firing the pressure is increased in the switching off switching element such that an acceleration collapse is reduced in the output of the automatic transmission.

13. Procedure according to one of the foregoing claims, characterized in that in addition to the motor firing the pressure is increased in the switching on switching element.